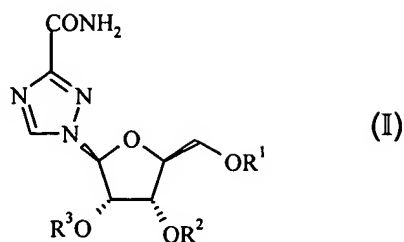


**We claim:**

1. A compound according to formula I



- 5 wherein (i)  $R^1$ ,  $R^2$  and  $R^3$  are independently selected from the group consisting of hydrogen,  $C_{1-10}$  acyl,  $C_{1-10}$  alkoxycarbonyl; or, (ii)  $R^1$  is  $COR^4$  where  $COR^4$  is the hydrochloride salt of an amino acid or a dipeptide and  $R^2$  and  $R^3$  are independently hydrogen,  $C_{1-10}$  acyl, or  $C_{1-10}$  alkoxycarbonyl; and, hydrates, solvates, clathrates thereof; with the proviso that at least one of  $R^1$ ,  $R^2$  and  $R^3$  is not hydrogen.
- 10
2. A compound according to claim 1 wherein  $R^1$  is  $COR^4$ , and  $R^4$  is  $CH(R^5)NH_3^+ Cl^-$  or pyrrolidin-2-yl,  $R^5$  is selected from the group consisting of  $CH(CH_3)_2$  and  $CH(CH_3)CH_2CH_3$ , and both  $R^2$  and  $R^3$  are hydrogen.
- 15
3. A compound according to claim 1 wherein  $R^1$  is  $COR^4$ , and  $R^4$  is  $CH(R^5)NH_3^+ Cl^-$ ,  $R^5$  is  $CH_3$ , and both  $R^2$  and  $R^3$  are hydrogen.
4. A compound according to claim 1 wherein  $R^1$ ,  $R^2$  and  $R^3$  are independently  $C_{1-10}$  acyl or  $C_{1-10}$  alkoxycarbonyl.
- 20
5. A compound according to claim 4 wherein the compound is: propionic acid 3*S*,4*S*-bis-propionyloxy-5*S*-(3-carbamoyl-[1,2,4]triazol-1-yl)-tetrahydro-furan-2*S*-ylmethyl ester
6. A compound according to claim 1 wherein  $R^1$  is  $C_{1-10}$  acyl or  $C_{1-10}$  alkoxycarbonyl and both  $R^2$  and  $R^3$  are hydrogen.
- 25
7. A compound according to claim 1 wherein  $R^1$  is hydrogen and both  $R^2$  and  $R^3$  independently are  $C_{1-10}$  acyl or  $C_{1-10}$  alkoxycarbonyl.

8. A compound according to claim 7 wherein the compound is:

isobutyric acid 2S-(3-carbamoyl-[1,2,4]triazol-1-yl)-5S-hydroxymethyl-4S-isobutyryloxy-  
tetrahydro-furan-3S-yl ester; or,

5 2,2-dimethylpropionic acid 4S-(2,2-dimethylpropionyloxy)-5S-(3-carbamoyl-[1,2,4]triazol-1-yl)-  
2S-hydroxymethyl-tetrahydro-furan-3S-yl ester

9. A method for modulating Th1 and Th2 immune activity comprising administering to a mammal a  
therapeutically effective amount of a compound according to Claim 1.

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10. A method according to claim 9 wherein  $R^1$  is  $COR^4$ , and  $R^4$  is  $CH(R^5)NH_3^+ Cl^-$  or pyrrolidin-2-yl,  $R^5$   
is  $CH(CH_3)_2$  or  $CH(CH_3)CH_2CH_3$ , and both  $R^2$  and  $R^3$  are hydrogen.

11. A method according to claim 9 wherein  $R^1$  is  $COR^4$ , and  $R^4$  is  $CH(R^5)NH_3^+ Cl^-$ ,  $R^5$  is  $CH_3$ , and both  
15  $R^2$  and  $R^3$  are hydrogen.

12. A method according to claim 9 wherein  $R^1$ ,  $R^2$  and  $R^3$  are independently hydrogen,  $C_{1-10}$  acyl or  
 $C_{1-10}$  alkoxycarbonyl.

20 13. The method of Claim 9 wherein the compound is delivered in a dose of between 0.1 and 300 mg/kg  
of body weight of the patient/day.

14. The method of Claim 9 wherein the compound is delivered in a dose of between 1.0 and 100 mg/kg  
of body weight of the patient/day.

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15. The method of Claim 9 wherein the compound is delivered in a dose of between 1.0 and 50 mg/kg  
of body weight of the patient/day.

16. The method of claim 9 wherein the mammal is a human.

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17. The method of Claim 9 further comprising at least one other immune system modulator.

18. The method of Claim 17 wherein the immune system modulator is an interferon or chemically-  
derivatized interferon.

19. The method of claim 18 wherein the chemically derivatized interferon is PEG-interferon- $\alpha$ -2a (PEGASYS®) or PEG-interferon- $\alpha$ -2b (PEG-INTRON™)

5 20. The method of Claim 9 further comprising a administering at least one other antiviral, antiparasitic or anticancer compound.

21. A pharmaceutical composition comprising a therapeutically effective amount of a compound according to claim 1 and at least one pharmaceutically acceptable carrier and optionally containing  
10 excipients.

22. A pharmaceutical composition according to claim 21 wherein  $R^1$  is  $COR^4$ , and  $R^4$  is  $CH(R^5)NH_3^+ Cl^-$ ,  $R^5$  is  $CH(CH_3)_2$ ,  $CH(CH_3)CH_2CH_3$  or  $CH_3$ , and both  $R^2$  and  $R^3$  are hydrogen.

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